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ABSTRACT

A study examined the impact of structure and organizational ideology on organizational communication and the efficacy of that communication behavior with reporters. To do this, a model was formulated and tested. A random sample of articles focusing on non-elective organizations was drawn from seven Maryland, Delaware, and District of Columbia newspapers, and questionnaires were sent to chief executive officers or public relations managers of 237 of the organizations mentioned in the articles. Completed questionnaires were received from 155 of the organizations. The articles were content analyzed to assess the tone of the articles and the values implied in them. Field interviews were conducted with eight pairs of reporters and organizational representatives to explore cases of high and low discrepancy on the salience, selection, and interpretation of issues, as well as on organizational credibility, legitimacy, and interorganization dependency. Results indicated that (1) structure was not shown to have a significant and measurable impact on communication in organizations; (2) organizational ideology does influence organizational communication, and especially the extent of organizational openness; and (3) organizational openness was shown to be negatively related to discrepancy in communication with news media. (Six tables and three figures of data are included; 51 references are attached.) (RS)

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ORGANIZATIONAL IDEOLOGY, STRUCTURE AND COMMUNICATION EFFICACY: A CAUSAL ANALYSIS

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ABSTRACT

This study formulates and tests a model of communication efficacy between organizations and media. By identifying communication discrepancies, or disagreements between organizational versions of reality and journalists' versions of reality, it is possible to show how organizational structure, ideology and communication behavior align to contribute to such discrepancies. The absence of discrepancy, it is suggested, is efficacious for organizations that are covered in news reports.

Organizational Ideology, Structure and Communication Efficacy: A Causal Analysis

During the past decade, scholars from the fields of organizational communication and public relations have exhibited interest in the strategies organizations utilize in communicating with outside publics. While the strategies, themselves, have been described (Grunig and Hunt, 1984) less is known about the efficacy of such strategies (Gandy, 1981; Turk, 1985; J.E. and L.S. Grunig, 1988).

Similarly, organizational sociologists have studied the influence of organizational structures on communication (Hage and Aiken, 1968; Hage, Aiken and Marrett, 1971; Aiken and Hage, 1971) and have looked at the impact of cultures on structures (Collins and Moore, 1970; Miller, Kets de Vries and Toulouse, 1982; Miller and Dorge, 1986) and of structures on communication (Perrow 1967; Pfeffer 1978; Liefer and Huber 1977), but less has been done to assess the simultaneous effects of structure and culture on communication and on communication efficacy (Theus, 1988).

To study the efficacy of organizational communication with outside constituencies, this research focused on the communication between source organizations and news media. Specifically, the study considered the impact of organizational structure and ideology on openness of communication with journalists and how that openness (or lack of it) contributed to either congruence or discrepancy between journalists and

organizational sources on the representation of organizational issues in news reports.

Such interchanges or "exchanges" between sources and journalists have customarily been examined from the perspective of the reporter (Lipsky, 1970; Fishman, 1977; Gans, 1979; Gitlin, 1980; Blumler and Gurevitch, 1981) but fewer researchers (Gandy, 1982; Turk, 1986; Theus, 1988, 1989) have studied the exchange from the perspective of the source organization. It stands to reason that source organizations may have important impacts on the stories journalists write, but for reasons only partly related to the organizational issues and actions of interest to journalists.

Organizational Structure, Culture and Communication

Organizational form has long been considered an important influence on organizational outputs. Much of the thinking that has emerged from the contingency model (Lawrence and Lorsch, 1967) has dealt directly with this issue. The basic notion is that there are multiple organizational forms that are most likely to be successful, depending upon the situation the organization is confronting. One of the major tasks of top management is to determine what the most appropriate organizational form is for various situations. It is not uncommon to find business firms in rapidly changing technological fields, for example, that have no formal tables of organization and organizational charts because the organization is in a constant change mode (Hall, 1982).

The literature has recognized that organizational goals and objectives, which drive the adaptation process, must also affect a substantial part of organizational arrangements. If policy statements affect the activities of organizational members as they function in their roles, they can also lead to structural changes that will reinforce this mode of operation (Katz and Kahn, 1966).

Recent studies of the influence of organizational culture on organizational behavior have generally focused on dimensions of culture as process, e.g., shared values, politics, social transactions, legends and rituals (Siramesh and Grunig, 1988), but have neglected the joint impact with structure on organizational actions.

Early work on culture suggested a conservative to liberal framework derived from the structural dimension, technology; but Perrow (1967) suggested that technology predicted other structural dimensions better than it did culture. While Perrow did not find consistent evidence to support his thesis, he suggested that the conservative or authoritarian end of the value continuum more often coincided with bureaucratic structures and the liberal end of the continuum more often coincided with differentiated structures.

Deal and Kennedy (1982) indicated that "core values" espoused by an organization determine everything from "what products get manufactured to how workers are treated" (p. 31). Structure, presumably, falls under the category of everything.

Along a similar vein, a study by Miller and Droge (1986) showed the CEO's need for achievement (a guiding vision) and the organization's size had the strongest relationships to structural constructs. Technology and uncertainty had little impact on structure. CEOs that had a need for achievement, had more impact in small struggling firms than in large firms. This outcome is not in conflict with findings relating to structural influences on communication systems, e.g., smallness and innovative goals are compatible with multi-level communication styles leading to change, even in the face of administrative control.

Characteristics of organizational structures have been shown to impede or enable the flow of information within organizations and externally to organizational constituents. Generally, large bureaucratic organizations feature greater centralization and stratification and less complex knowledge bases. These structures tend to constrain information flow through one-way, top-down communication systems (Hage and Aiken, 1968; Hage, 1980). Such organizations gain efficiency through coordination and control of subordinates rather than through the introduction of new ideas. Thus, bureaucratic structures often stifle innovation, lower morale, and constrain feedback (Hage, 1980).

On the other hand, smaller decentralized, destratified and differentiated organizations with highly educated or skilled experts tend to use multi-level, multi-channel communication to exchange information and to increase innovation (Blau, 1972; Hage, 1980; Hall, 1982).

Organizational dependence on an outside source for resources, even if that resource is a community's good will, also serves as a powerful determinant of communications, transactions and consensus building (Emery, Marek and Trist, 1965; Thompson, 1967; Aiken and Hage, 1968; Aldrich, 1979; Hage, 1980). When one organization is able to control the definition and interpretation of another organization's activity, that entity may be said to have the power to establish organizational legitimacy (Pfeffer and Salanick, 1978) and may call into question organizational credibility. Media are often regarded as having such power (Mintzberg, 1983).

Environmental uncertainty also increases communication (Van de Ven and Walker, 1984). Innovative organizations characteristically experience a great deal of uncertainty in the environment and communicate to coordinate external relationships, especially in the presence of high capital investment and technical demand (Thompson, 1967). Differentiated, decentralized, innovative organizations may be more open to journalists than those from traditional, centralized organizations because the ideology of the former values open communication as a means of coordination (Pfeffer and Salanick, 1978).

Hypotheses

The current study, in identifying the likelihood of disagreements or discrepant outcomes between organizations and reporters on the salience, selection and interpretation

(accuracy, framing and emphasis) of news reports, examines the communication of an organization as a causal system with established relationships among the organization's structure, ideology and communication behavior.

This study then, postulates several hypotheses:

Hy. 1 The more differentiated the organization's structure, the greater the organizational openness.

Hy. 2 The more value placed on openness by organizational ideology, the greater the organizational openness.

Hy. 3 The greater the organizational openness, the less the discrepancy in reporting (and the greater the communication efficacy).

Operationalization

Organizational structure derives from Weber's definition (1946), which refers to how work is organized. Work arrangements determine the amount and quality of products produced or services provided. Weber felt that a strict hierarchy of authority and a reliance on rules would facilitate greater efficiency. His has been characterized as a bureaucratic or mechanical model.

Burns and Stalker (1961) on the other hand envisioned a differentiated or organic organizational form held in tension

with its external environment, and constantly adapting to feedback in a cybernetic system. Their emphasis, rather than on centralization of and loyalty to vertically stratified authority, focused on work arrangements that value technical skill, response to markets, innovation and product development. Organic organizations, they found, usually have decentralized network structures of control and authority, with communication systems consisting of information and advice, which aid in greater adjustment to and redefinition of task.

Thus, measures of organizational structure used in this study were designed to show the relationship between the organic and mechanical model. They included: centralization (degree of centralization of power in making strategic decisions), stratification (degree of differentiation in pay, power or prestige), and complexity (concentration of skilled specialists). See Hage 1980:63-68.

Organizational ideology, or the importance of overarching organizational values, was very much a part of the structural-functional perspective in the 50s (Gouldner, 1954; Blau, 1955, Parsons, 1956), but during the 60s, many lost sight of this essential ingredient for understanding organizational behavior. It was Perrow (1967) referenced above, who most effectively brought back a goal or value perspective, especially the notion of the derivation and character of organizational goals, even though he did so in the context of technology. Structural functionalism argues that the origin of values, such as

organizational objectives, lies in structure.

The other view is that values have an independent origin, and one that lies in other aspects of collective attitudes (Karpick 1972; Child 1977, Warner 1977). Little work has been done on the origins of values held by dominant coalitions in organizations and the degree of control these perspectives exert over organizational norms, or whether organizational leaders become socialized to pre-existent organizational ideologies.

Organizational ideology in this study was assessed by determining the relative importance of a range of economic and social value orientations to the organization, such as willingness to disclose organizational perspectives to publics and to incorporate new perspectives into the organizational information system, reducing costs, profit-making, efficiency, social responsibility and organizational growth.

Organizational openness. Mechanisms for coordination and control in organizations were described by Perrow (1967) as falling along a continuum of cultural expectations (goals and objectives, plans and programs), communication arrangements (volume, formalization, direction and special arrangements, e.g. committee structures) and incentive structures (rewards, peer approval, sanctions, task visibility and attitude conformity). While most of the organizational literature emphasizes internal organizational arrangements and attributes, the implications for organizational communication across organizational boundaries are pronounced.

For example, Grunig and Hunt (1984) have focused on interorganizational communication through a study of public relations practices. They found that such boundary spanning communication has generally taken four forms: publicity (press agentry, promotion), public information (dissemination of information), two-way asymmetric communication (persuasion based on research to gain a strategic advantage over publics), and two-way symmetric communication (dialogue based on research to reach mutual understanding on issues of concern to the organization and publics).

Because the literature suggests that organic organizations rely on cybernetic principles and feedback to help them adapt to environmental contingencies, these organizations should be more likely to stress two-way boundary spanning communication approaches, particularly symmetric communication for organizational communication. An organization that relies on symmetric feedback to adjust, but not exclusively to press its own advantage, may be described as open.

Mechanical organizations, subject to more stable routines and environmental expectations, should emphasize publicity and public information to a greater degree. These organizations, precisely because their structures are more centralized and stratified, should be more likely to exercise control over communication outcomes through non-disclosure, limited disclosure or message manipulation -- closed forms of communication.

To assess the degree of organizational openness in this study, measures focused on the organizations' customary use of publicity, public information, two-way asymmetric and two-way symmetric communication with media. Measures of symmetric communication emerged as predictive for the model. (A concept included in an early form of the model, openness of communication on the specific issue, was later dropped because of slight redundancy between its measures and those used to gauge organizational openness.)

Finally, discrepancy was conceptualized as the degree of non-correspondence in views on the coverage of organizational issues in news reports between organizational communicators (as represented in surveys and interviews) and reporters (as represented in content analysis of articles and interviews). The dimensions of discrepancy in reporting centered on issue salience, selection of information, accuracy of information, framing of the organization and issue in the news report, and emphasis on specific elements contained therein.

Method

In order to study the impact of structure and organizational ideology on organizational communication, and to ascertain the efficacy of that communication behavior with reporters, a random sample of articles focusing on non-elective organizations was drawn from seven Maryland, Delaware and District of Columbia newspapers. Organizations mentioned in these articles were

identified and the CEO or public relations manager was sent a questionnaire designed to identify organizational structures, values, communication philosophies, communication behaviors with media, generally, and on the issue that stimulated the news report, and to identify perceptions of the news report as compared with the organization's own understanding of the issue (n=237, 155 returned for 64.5 percent response rate).

Simultaneously, the articles were content analyzed by independent coders to assess the tone of articles and the values implied in them. In addition, field interviews were conducted with eight pairs of reporters and organizational representatives to explore cases of high and low discrepancy on the salience, selection and interpretation of issues, as well as on organizational credibility, legitimacy and interorganizational dependency.

The scaling procedure for the survey, although somewhat complicated for respondents, was chosen to maximize correlations in standard statistical programs and in LISREL analyses (Joreskog and Sorbom, 1981). Most questions used a zero to infinity scale with 100 identified as the average on all items (thereby giving respondents a unit of measure by which to estimate their own positions). A zero indicated total absence of an attribute, while multiples of 100 indicated proportions of an attribute greater or lesser than "average." A percentage scale was used on one section of the questionnaire and demographics were generally evaluated as categorical variables.

A LISREL structural equation analysis was used to estimate the parameters of a model proposed in Figure 1. LISREL uses the maximum likelihood method to estimate model parameters. The data set used for this analysis came from the survey exclusively; however, it should be noted that the outcome of the LISREL analysis reported here complemented the canonical correlations utilizing both survey data and data from the content analysis of news articles.

A number of manipulations were performed on the data after a review of the statistics revealed variables that had somewhat less than normal distributions of cases. One of the assumptions underlying the correct use of regression analysis, upon which maximum likelihood methods are build, is that error terms are normally distributed. Thus variables were transformed into logarithms or square roots of their original values in order to normalize distributions to a level at which the "robustness" of regression would overcome violations of regression assumptions (see Kerlinger and Pedhazar, 1973, for example). Because it is impossible to calculate a logarithm or square root of zero, an additional transformation of several cases involved adding one to the distribution's lowest variable value for each case with a zero value. Only five of 98 variables fell outside a range of +2 or -2. Care was taken in the interpretation of results when these variables were used in analyses.

The LISREL Analyses

The general linear model is a comprehensive scheme for representing all elements and relationships of a theory in a single structure. It permits the modeling of theoretical, derived and empirical concepts. The model provides a direct measure of the degree to which theoretical constructs are related, the extent of errors in equations and variables, and the relationships between constructs and operationalizations. Since the approach is a maximum likelihood procedure, parameter estimates are independent of scales of measurement for the variables in the model. LISREL, further, allows the researcher to determine how good one's model is and to diagnose incorrect specifications of cause and effect by providing a test statistic for the whole model.

The LISREL model consists of two parts: the measurement model and the structural equation model. The measurement model specifies how the latent variables or hypothetical constructs are measured through observed variables. The structural equation model specifies the causal relationships among the latent variables and is used to describe the causal effects and the amount of unexplained variance.

The program calculates coefficients of determination for structural equations as a whole, which show how well the observed variables serve as measurement instruments for the latent variables. These coefficients fall between zero and one, large values being associated with good models. The Chi Square and

Goodness of Fit Index (GFI) show the fitting function of the data to the specified model. The Chi Square statistic is only valid as a test if all the observed variables have a multivariate normal distribution, the analysis is based on the sample covariance matrix and the sample size is fairly large. In this analysis the presence of skew from outliers may have affected the Chi Square statistic to some degree. However, as an indicator of goodness of fit, the Chi Square may be used. (Introduction of additional parameters in numerous analyses of this data did not create substantial improvement in the Chi Square ratio. Its stability over multiple modifications indicated its overall reliability as a goodness of fit indicator for this data set.)

Unlike the Chi Square, the Goodness of Fit Index is independent of sample size and is relatively robust against departures from normality. It is a measure of the relative amount of variances and covariances jointly accounted for by the model and should fall between zero and one, although it is theoretically possible for the GFI to become negative. The GFI can be used to compare the fit of models for the same or for different data.

The Root Mean Square Residual is a measure of the average of the residual variances and covariances and can be used to compare the fit of two different models for the same data. T-Values calculated for paths of empirical and theoretical measures indicate the significance of path coefficients; those values greater than 1.96 are assumed to be non-zero. The program also

computes a Modification Index, which suggests paths that could be added to the model to strengthen its fit to the data. If paths indicated do not fit the theory, then modifications should not be made.

The model that follows in Figure 1 indicates the theoretical model [Xi (ξ) exogenous theoretical variables and Eta (η) endogenous theoretical variables] and the measurement model consisting of empirical measures of observed variables (x for exogenous measures and y for endogenous measures).

Empirical measures of theoretical variables chosen for the analysis were strongly correlated in the canonical correlation analysis. The theoretical concepts studied included organizational ideology, and complexity of organizational structure (exogenous variables), and organizational openness, openness of organizational behavior, and discrepancy (endogenous variables). Specifically, symmetric communication was assessed by the extent to which organizational communicators provided information to help media understand the organization, provided all information journalists asked for, and provided accurate information to media. Discrepancy was measured by the extent to which the issue in the news article was significant to top managers (salience); they believed the issue was reported completely (selection); they wanted the issue reported as completely as it was (selection); the story was reported accurately (accuracy); the reporter had not formed an opinion before writing the story (frame); the article did not reflect

that previously reached opinion (frame) the reporter did not over-emphasize or exaggerate information in the story (emphasis); and top managers would not have emphasized something different in the story (emphasis). Complexity was identified as the extent to which employees had no specialized skill and little or no higher education; employees had at least a college degree; employees had a graduate degree; organizational work was done at remote locations.

In first iterations of the model, variables for centralization and stratification of organizational structure were included, but because these attenuated the T-Values of other structural variables, they were excluded in subsequent models.

Findings

Figure 1 and Tables 1 and 2 show the outcome of LISREL maximum likelihood estimates of the original theoretical model proposed. Variables described in abbreviated form below include symmetry, discrepancy and complexity. A glossary of indicators used in the analysis includes the following:

Endogenous Variables

Organizational Openness

LY 1,1	symmetric communication strategy 1
LY 2,1	symmetric communication strategy 2
LY 3,1	symmetric communication strategy 4

Openness of Communication

LY 4,2	degree of openness on issue
LY 5,2	article represented organization as good
LY 6,2	use of organization as source
LY 7,2	article represented organization as open

Discrepancy
LY 8,3 discrepancy in salience 1
LY 9,3 discrepancy in selection 1
LY 10,3 discrepancy in selection 2
LY 11,3 discrepancy in accuracy 1
LY 12,3 discrepancy in framing 1
LY 13,3 discrepancy in framing 2
LY 14,3 discrepancy in emphasis 1
LY 15,3 discrepancy in emphasis 2

Exogenous Variables

Organizational Ideology
LX 1,1 ideology of openness
LX 2,1 value reducing costs
LX 3,1 value of profit-making
LX 4,1 value of efficiency
LX 5,1 value of social responsibility
LX 6,1 value of growth

Complexity of Organizational Structure
LX 7,2 complexity 1
LX 8,2 complexity 2
LX 9,2 complexity 3
LX 10,2 complexity 4

Tables 1 and 2 contain both the maximum likelihood estimates and the standardized solutions, as suggested by McPhee and Babrow (1987, p.357). Tables also contain T-Values, reflecting the presence of non-zero parameters with significance levels greater than 1.96. The first model was discarded because the Psi matrix was not positive definite, indicating multi-colinearity among measures of Eta1 and Eta2 (organizational openness and openness of communication). In the discarded model, only Eta 2,1 was significant. Modifications suggested by the Modification Index did not result in positive definite parameters for Psi. Even though the goodness of fit indices showed that the

FIGURE 1

MEASUREMENT AND THEORETICAL MODEL

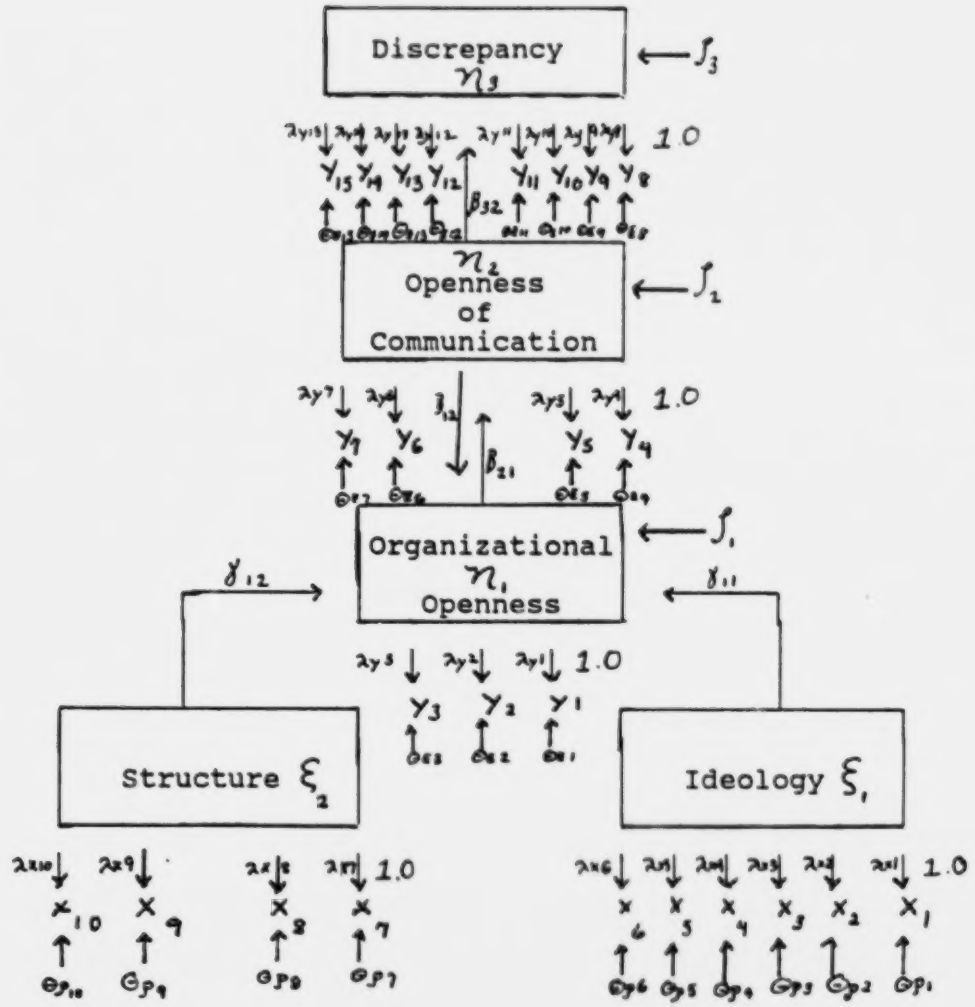


TABLE 1

LISREL ESTIMATES FOR THE MEASUREMENT MODEL

	Initial Estimate	Maximum Likelihood Estimate	Standard Solution	T-Value
Endogenous Variables				
Organizational Openness				
Indicator 1 (LY 1,1)	1.00	1.00	.70	.00
Indicator 2 (LY 2,1)	.70	1.08	.75	8.95
Indicator 3 (LY 3,1)	.60	1.07	.74	8.87
Openness of Communication				
Indicator 1 (LY 4,2)	1.00	1.00	.46	.00
Indicator 2 (LY 5,2)	.33	1.3	.63	5.27
Indicator 3 (LY 6,2)	1.06	1.22	.56	4.99
Indicator 4 (LY 7,2)	.52	1.99	.92	6.09
Discrepancy				
Indicator 1 (LY 8,3)	1.00	1.00	.30	.00
Indicator 2 (LY 9,3)	.72	1.90	.56	2.98
Indicator 3 (LY 10,3)	.40	1.78	.53	2.93
Indicator 4 (LY 11,3)	.66	1.86	.55	2.96
Indicator 5 (LY 12,3)	.34	1.72	.51	2.90
Indicator 6 (LY 13,3)	.42	1.65	.49	2.87
Indicator 7 (LY 14,3)	.30	1.78	.53	2.93
Indicator 8 (LY 15,3)	.57	1.83	.54	2.96
Exogenous Variables				
Organizational Ideology				
Indicator 1 (LX 1,1)	1.00	1.00	.31	.00
Indicator 2 (LX 2,1)	1.11	2.75	.84	3.57
Indicator 3 (LX 3,1)	.83	1.40	.42	3.04
Indicator 4 (LX 4,1)	.67	1.84	.56	3.31
Indicator 5 (LX 5,1)	.94	2.69	.82	3.57
Indicator 6 (LX 6,1)	.57	1.27	.39	2.92
Organizational Structure (Complexity)				
Indicator 1 (LX 7,2)	1.00	1.00	.79	.00
Indicator 2 (LX 8,2)	.80	.95	.75	7.64
Indicator 3 (LX 9,2)	.84	.91	.72	7.55
Indicator 4 (LX 10,2)	.20	.20	.16	1.74

TABLE 2

LISREL ESTIMATES FOR THE THEORETICAL MODEL

Structural Coefficients

	Initial Estimate	ML Estimate	Standard Solution	T Value
(The first numeral refers to the direction of the path toward the target variable, and the second numeral refers to the origin of the path. E.g., Eta 1,2 would be depicted as Eta1 ------ Eta2.)				
Beta Matrix				
Eta 1,2	.75	.67	1.01	1.00
Eta 2,1	.79	.89	.59	5.24
Eta 2,3	-.74	-.10	-.15	-.92
Gamma Matrix				
Eta 1, Xi 1	.37	.60	.26	.67
Eta 2, Xi 1	-.07	.05	.05	.63
Phi Matrix				
Xi1, Xi 1	.42	.09	1.00	1.80
Xi2, Xi 1	-.11	-.04	-.18	-1.62
Xi2, Xi 2	.72	.62	1.00	5.00
Psi Matrix		*		
Eta 1, Eta 1	.14	.02	.05	.14
Eta 2, Eta 1	-.10	.02	.07	1.12
Eta 3, Eta 1	.00	.00	.00	.00
Eta 2, Eta 2	.21	-.02	-.09	-1.43
Eta 3, Eta 2	.03	-.01	-.05	- .92
Eta 3, Eta 3	.55	.08	.94	1.62

* The ML Estimate determined Psi not to be positive definite

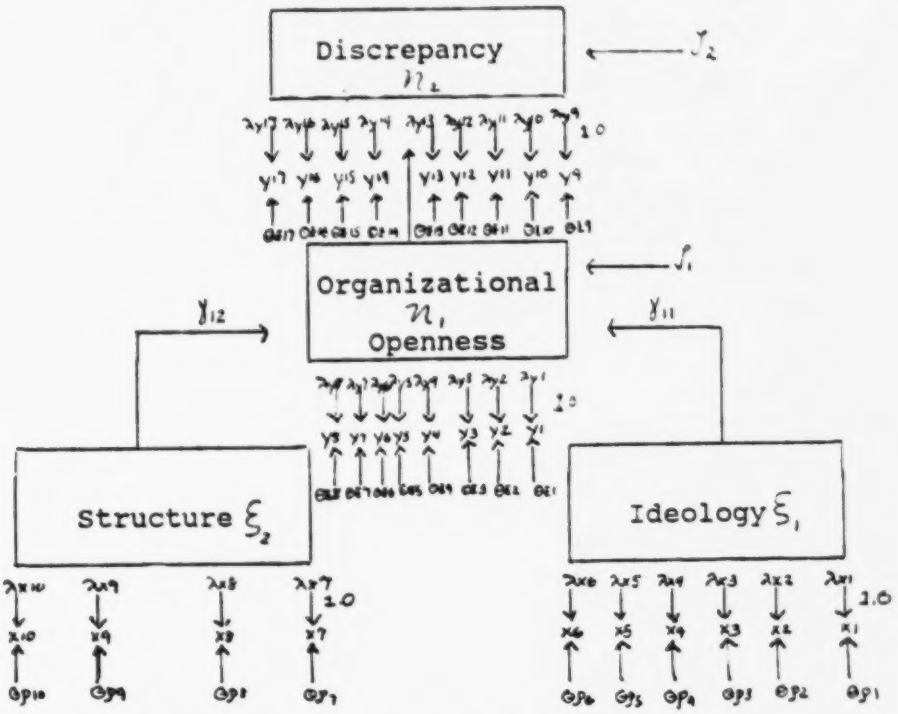
Goodness of Fit

Chi-Square for Sigma (df=267)	962.4 (p = <.000)
Chi-Square Ratio for Goodness of Fit	3.59 **
Goodness of Fit Index	.67
Adjusted Goodness of Fit Index	.60
Root Mean Square Residual	.12

** When the Chi Square statistic is divided by the degrees of freedom, if the result is less than five, then the data are said to fit the model well.

FIGURE 2

MEASUREMENT AND THEORETICAL MODEL



data fit the model moderately well and the chi square ratio (less than five) also indicated an acceptable fit, the estimates should not be trusted.

Subsequent models estimated were modified to collapse Eta 1 (organizational openness) and Eta 2 (openness of communication behavior) because the two concepts appeared to be indistinguishable in LISREL computations, showing a common underlying factor structure. Figure 7 shows the new model to be tested and its indicators.

Tables 3 and 4 show the outcome of LISREL maximum likelihood estimates of the modified measurement and theoretical model. A glossary of indicators includes the following:

Endogenous Variables

Organizational Openness
LY 1,1 symmetric communication strategy 1
LY 2,1 symmetric communication strategy 2
LY 3,1 symmetric communication strategy 3
LY 4,1 symmetric communication strategy 4
LY 5,1 degree of openness on issue
LY 6,1 article represented organization as good
LY 7,1 use of organization as source
LY 8,1 article represented organization as open

Discrepancy
LY 9,2 discrepancy in salience 1
LY 10,2 discrepancy in salience 2
LY 11,2 discrepancy in selection 1
LY 12,2 discrepancy in selection 2
LY 13,2 discrepancy in accuracy 1
LY 14,2 discrepancy in framing 1
LY 15,2 discrepancy in framing 2
LY 16,2 discrepancy in emphasis 1
LY 17,2 discrepancy in emphasis 2

Exogenous Variables

Organizational Ideology
LX 1,1 ideology of openness
LX 2,1 value reducing costs
LX 3,1 value of profit-making
LX 4,1 value of efficiency
LX 5,1 value of social responsibility
LX 6,1 value of growth

Complexity of Organizational Structure
LX 7,2 complexity 1
LX 8,2 complexity 2
LX 9,2 complexity 3
LX 10,2 complexity 4

TABLE 3

LISREL ESTIMATES FOR THE MEASUREMENT MODEL

	Maximum Likelihood Estimate		Standard Solution		T-Value	
Endogenous Variables						
Organizational Openness	Eta1	Eta2	Eta1	Eta2	Eta1	Eta2
Indicator 1 (LY 1,1)	1.00	.00	.68	.00	.00	.00
Indicator 2 (LY 2,1)	1.13	.00	.77	.00	8.83	.00
Indicator 3 (LY 3,1)	.43	.00	.29	.00	3.48	.00
Indicator 4 (LY 4,1)	1.13	.00	.77	.00	8.82	.00
Indicator 5 (LY 5,1)	.48	-1.33	.32	-.43	4.08	-3.40
Indicator 6 (LY 6,1)	.93	.00	.64	.00	7.39	.00
Indicator 7 (LY 7,1)	.64	-1.24	.44	-.40	5.51	-3.02
Indicator 8 (LY 8,1)	1.42	.15	.96	.05	10.13	.91
Discrepancy						
Indicator 1 (LY 9,2)	.00	1.00	.00	.32	.00	.00
Indicator 2 (LY 10,2)	.00	1.24	.00	.40	.00	2.91
Indicator 3 (LY 11,2)	.00	1.67	.00	.54	.00	3.25
Indicator 4 (LY 12,2)	.00	1.91	.00	.62	.00	3.36
Indicator 5 (LY 13,2)	.00	1.68	.00	.55	.00	3.25
Indicator 6 (LY 14,2)	.00	1.30	.00	.42	.00	2.97
Indicator 7 (LY 15,2)	.00	1.21	.00	.39	.00	2.88
Indicator 8 (LY 16,2)	.00	1.27	.00	.48	.00	2.94
Indicator 9 (LY 17,2)	.00	1.48	.00	.48	.00	3.12
Exogenous Variables						
Organizational Ideology						
Indicator 1 (LX 1,1)	1.00	.00	.00	.00	.00	.00
Indicator 2 (LX 2,1)	2.74	.00	.84	.00	3.59	.00
Indicator 3 (LX 3,1)	1.24	-.35	.38	- .28	2.95	-3.26
Indicator 4 (LX 4,1)	2.67	.00	.82	.00	3.58	.00
Indicator 5 (LX 5,1)	1.83	.00	.56	.00	3.33	.00
Indicator 6 (LX 6,1)	1.27	.00	.00	.39	2.94	.00
Organizational Structure (Complexity)						
Indicator 1 (LX 7,2)	.00	1.00	.00	.78	.00	.00
Indicator 2 (LX 8,2)	.00	.94	.00	.74	7.74	.00
Indicator 3 (LX 9,2)	.00	.94	.00	.73	7.70	.00
Indicator 4 (LX 10,2)	.00	.19	.00	.15	1.63	.00

TABLE 4

LISREL ESTIMATES FOR THE THEORETICAL MODEL

Structural Coefficients

	ML Estimate	Standard Solution	T-Value
Beta Matrix			
Eta 2,1	-.13	-.28	-2.21
Gamma Matrix			
Eta 1, Xi 1	1.41	.62	3.25
Eta 1, Xi 2	.11	.13	1.62
Phi Matrix			
Xi1, Xi 1	.09	1.00	1.81
Xi2, Xi 1	-.04	- .16	-1.47
Xi2, Xi 2	.61	1.00	5.03
Psi Matrix			
Eta 1	.28	.61	4.44
Eta 2	.10	.92	1.82

Goodness of Fit

Coefficient of Determination	.40
Chi-Square for Sigma (df=400)	1225.73 (p = <.000)
Chi-Square Ratio for Goodness of Fit	3.56**
Goodness of Fit Index	.66
Adjusted Goodness of Fit Index	.60
Root Mean Square Residual	.12

** When the Chi Square statistic is divided by the degrees of freedom, if the result is less than five, then the data are said to fit the model well.

Goodness of fit indicators showed the data fit the model moderately well. Estimates of the path coefficients supported the theoretical model as modified and were consistent with the canonical correlational analysis. Value structures do seem to influence the communication of the organization. With a T-Value of 1.62, complexity did not achieve a great enough level of significance to assume a non-zero influence on openness. However, organizational ideology contributes significantly to organizational openness. Finally, T-Values indicate open communication is negatively related to discrepant communication.

As a check on the maximum likelihood estimates, unweighted least squares estimates were run because these estimators are less sensitive to outliers causing non-normality or skew in the data. The ULS Coefficient of Determination and the Root Mean Square Residual were very similar to ML indices; however, ULS improved the goodness of fit estimators substantially, suggesting the attenuation of ML estimators due to outliers in the data. Even though ML estimators are robust under conditions of non-normality (Bagozzi 1980), Joreskog and Sorbom (1981) suggest use of ULS when the determinant is very small relative to the magnitude of the diagonal elements in the correlation matrix. Since the determinant for this matrix was .006242635 the ULS indicators should be the preferred estimators. In the ULS analysis, path coefficients increased. Table 5 shows the ULS measurement

model and Table 6 shows a comparison between ML and ULS estimators and their standardized counterparts along with the regression matrices between endogenous and exogenous variables. Figure 3 shows the model using both sets of standardized path coefficients. (ULS coefficients are enclosed in parentheses.) When data were displayed as Q-Plots using ML and ULS estimation methods, both plots indicated linearity and moderate fits to the data. In inspecting the goodness of fit measures between the original model and the modified model, few changes occurred among the indicators of fit, confirming, generally, the stability of the model and the theoretical relationships hypothesized.

Taken as a whole, these analyses suggest the following about the proposed hypotheses:

Hy 1. Structure was not shown to have a significant and measurable impact on communication in organizations, and thus the hypothesis was not supported.

Hy 2. Organizational ideology does influence organizational communication, and especially the extent of organizational openness. Hypothesis 2 was supported.

Hy 3. Finally, organizational openness was shown to be negatively related to discrepancy in communication with news media, as suspected.

TABLE 5

ULS ESTIMATES FOR THE MEASUREMENT MODEL

	Maximum Likelihood Estimate		Standard Solution	
Endogenous Variables				
Organizational Openness	Eta1	Eta2	Eta1	Eta2
Indicator 1 (LY 1,1)	1.00	.00	.71	.00
Indicator 2 (LY 2,1)	1.02	.00	.73	.00
Indicator 3 (LY 3,1)	.48	.00	.34	.00
Indicator 4 (LY 4,1)	1.03	.00	.73	.00
Indicator 5 (LY 5,1)	.56	-1.03	.40	-.35
Indicator 6 (LY 6,1)	.95	.00	.67	.00
Indicator 7 (LY 7,1)	.70	- .96	.49	-.33
Indicator 8 (LY 8,1)	1.36	.28	.97	.09
Discrepancy				
Indicator 1 (LY 9,2)	.00	1.00	.00	.34
Indicator 2 (LY 10,2)	.00	1.38	.00	.47
Indicator 3 (LY 11,2)	.00	1.70	.00	.57
Indicator 4 (LY 12,2)	.00	1.77	.00	.60
Indicator 5 (LY 13,2)	.00	1.57	.00	.53
Indicator 6 (LY 14,2)	.00	1.21	.00	.41
Indicator 7 (LY 15,2)	.00	1.02	.00	.34
Indicator 8 (LY 16,2)	.00	1.29	.00	.44
Indicator 9 (LY 17,2)	.00	1.51	.00	.51
Exogenous Variables				
Organizational Ideology				
Indicator 1 (LX 1,1)	1.00	.00	.36	.00
Indicator 2 (LX 2,1)	2.30	.00	.82	.00
Indicator 3 (LX 3,1)	1.20	-.37	.41	- .27
Indicator 4 (LX 4,1)	2.20	.00	.78	.00
Indicator 5 (LX 5,1)	1.42	.00	.51	.00
Indicator 6 (LX 6,1)	1.29	.00	.46	.00
Organizational Structure (Complexity)				
Indicator 1 (LX 7,2)	.00	1.00	.00	.74
Indicator 2 (LX 8,2)	.00	.94	.00	.69
Indicator 3 (LX 9,2)	.00	1.09	.00	.81
Indicator 4 (LX 10,2)	.00	.23	.00	.17

TABLE 6

LISREL ML AND ULS ESTIMATES FOR THE THEORETICAL MODEL

Structural Coefficients	ML Estimate	Standard Solution	ULS Estimate	Standard Solution
Beta Matrix				
Eta 2,1	-.13	-.28	-.15	-.32
Gamma Matrix				
Eta 1, Xi 1	1.41	.64	1.27	.64
Eta 1, Xi 2	.11	.13	.24	.25
Phi Matrix				
Xi1, Xi 1	.09	1.00	.13	1.00
Xi2, Xi 1	-.04	-.16	-.04	-.15
Xi2, Xi 2	.61	1.00	.55	1.00
Psi Matrix				
Eta 1	.28	.61	.29	.58
Eta 2	.10	.92	.10	.90

Goodness of Fit	ML Solution	ULS Solution
Coefficient of Determination	.40	.42
Goodness of Fit Index	.66	.83
Adjusted Goodness of Fit Index	.60	.80
Root Mean Square Residual	.12	.12

Regression Matrix (ML)

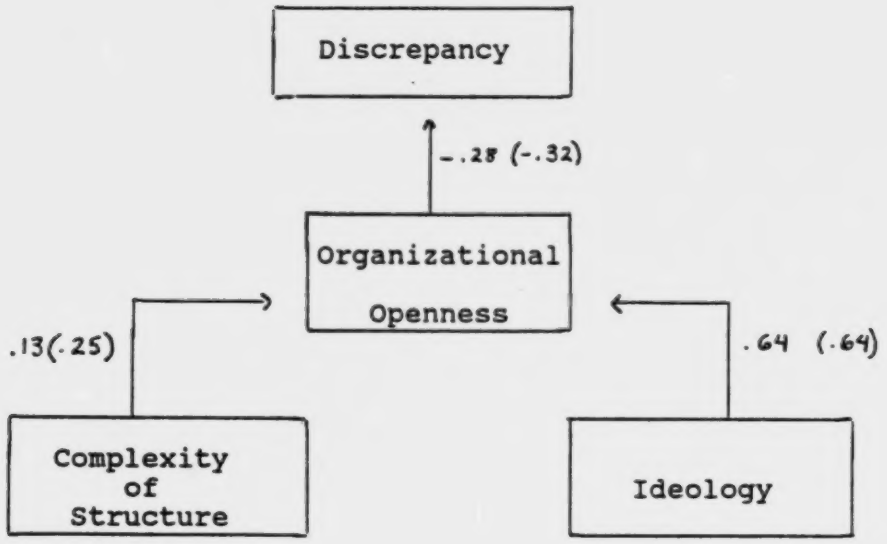
	Xi1	Xi2
Eta1	.64	.13
Eta2	-.18	-.04

Regression Matrix (ULS)

	Xi1	Xi2
Eta1	.64	.25
Eta2	-.21	-.08

FIGURE 3

THEORETICAL MODEL



Summary

The larger study of which this analysis is a part indicates that organizations either proactively seek to subsidize news by "placing" information with journalists, or reactively respond to inquiry from journalists along a continuum of openness to closedness.

A canonical correlation analysis (Theus, 1988) suggested that organizational values and structures and the adeptness of organizational communicators serve as mechanisms to drive this communication behavior. However, in the LISREL analysis reported here, structure dropped out, suggesting a much more important role for organizational culture as a determinant of communication. The LISREL analysis also showed that openness in communication serves as an antidote for discrepancy, its primary strength derived from organizational values supportive of openness. Closed communication increases discrepancy and open communication decreases it. While canonical correlational analyses showed that organic or differentiated organizations are more likely to be open than mechanical or highly bureaucratic organizations, the strength of the relationship in the LISREL analysis as measured by the T-Value, fell just below the 1.96 significance level required to indicate a non-zero path.

The relationship between ideology and structure was not tested in the LISREL analysis, but canonical correlations suggested that centralization and stratification provide neutral environments for the development of capitalistic organizational

values -- profit, competition, reducing costs and efficiency. These same values, however, were negatively associated with measures of complexity (Theus, 1988). Such an outcome may be explained by the nature of the organic organization. Its typically horizontal span of control and emphasis on research and development often engage the organization in high risk expenditures of both time and organizational assets. Emphases on efficiency and profit, in particular, tend to discourage such risk taking.

On the other hand, values shown to correlate with complexity, such as organizational openness and organizational survival, follow logically from the design of organic organizations. Lateral structure, designed to increase innovation, employs communication horizontally across positions. With outlays for research dominating the organization's fiscal arrangements, and with payoffs of profits not yet secure, organizational survival emerges high on the organizational agenda.

Path coefficients in the LISREL analysis indicated that organizational values have a strong direct effect on organizational openness. Values contributing to openness include accountability to the public and service. Organizations embracing openness in this analysis were likely to provide accurate but not necessarily complete information to journalists. Generally, organizational values fostered no incentives for communicators to provide management with journalists' perspectives.

Results of canonical correlations conducted prior to the LISREL analysis (Theus, 1988) showed that organizations exhibiting closed behaviors often promoted the organization's products and services and attempted to persuade media to accept the organization's view of issues. They did not see communication as a negotiation and did not embrace values of open communication. Organizations oriented toward progress, a byword for competitiveness, typically employed asymmetric communication strategies. Profit, competition, efficiency and growth were linked to withholding unfavorable organizational information from media (a closed, or strategically asymmetric response). An organization's willingness to provide complete and accurate information appeared to be linked to its goals of accountability and service to the public.

The strong negative path between organizational openness and discrepancy in the LISREL analysis showed that open communication addresses problems of discrepancy in reporting. The analysis showed that strategic withholding of information from media by communicators may result in an organization's finding fewer criticisms of the articles covering their organizations. That is to say, if the organization has seized the issue and defined it, it may not be necessary to provide all information relevant to that issue.

But the consequences of withholding too much organizational information may be dire. The negative path, then should sensitize organizational designers that communication efficacy is related

to organizational values. Organizations valuing public accountability experience less discrepancy in their communication with journalists, in part because they may exercise the opportunity to provide accurate and somewhat complete information, framed and emphasized in ways the organization feels justified.

The antagonism organizations feel toward media may actually stem from the organization's failure to participate in the development of the frames journalists impose on them in news reports. Even if organizations frame themselves as primarily concerned with service and accountability to the public, they may utilize closed communication strategies because of excessive concern over lost profits, loss of a competitive edge or loss of efficiency -- and these are the very frames that journalists perceive and emphasize in the stories focusing on public accountability they write about closed organizations.

Because communication behavior and efficacy as a function of organizational structure and ideology have not generally been studied simultaneously, this study raises many questions. If organizational structure is not a critical determinant of communication outcomes, then management of organizational culture becomes the pillar upon which communication efficacy rests. Attention should be given to differences in measures of structure to explain why the influence of structure appears as significant in some studies and drops out in others. Additional work may identify more specifically the value orientations that lead to

differing communication strategies (sorted by organizational type) and whether those values pervade the organizational system or reside primarily in the dominant coalition. If structure has little or no impact on communication, it would be appropriate to assess the impact ideology has on structure that may account for the attenuation of its effects. Future analyses should consider the effects of structure, ideology and open communication on organizational credibility and legitimacy. (The canonical correlation suggested that openness improved both.) Such information my provide organizational managers with insights to consider when representing their organizations to external constituencies.

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